Project Description

SANTA MARIA RIVER, ORCUTT-SOLOMON CREEK, AND OSO FLACO CREEK WATERSHEDS NUTRIENT TMDLS

The proposed activity is the adoption of an amendment to the Central Coast Water Quality Control Plan (Basin Plan), to incorporate total maximum daily loads (TMDLs) for nutrients in the Santa Maria, Orcutt-Solomon, and Oso Flaco watersheds. The Basin Plan designates beneficial uses of waterbodies, establishes water quality objectives for the protection of these beneficial uses, and outlines a plan of implementation for achieving and maintaining those objectives and protecting water quality. In addition to establishing TMDLs for nutrients, this Basin Plan amendment allocates those loads to sources and includes an implementation plan and compliance schedule for reducing pollutant loading to meet the allocations and reduce the concentrations of nutrients to levels that protect the beneficial uses of the waters in the Santa Maria, Orcutt-Solomon, and Oso Flaco watersheds.

The Santa Maria, Orcutt-Solomon, and Oso Flaco watersheds are located in northwestern Santa Barbara County and southwestern San Luis Obispo County, California. The watersheds are about 50 miles north of Point Conception and about 150 miles south of Monterey Bay on the central California coast. The watersheds include the Guadalupe-Nipomo Dunes complex.

Beneficial Uses

The beneficial uses for these waterbodies identified in the Basin Plan that are associated with nutrients are municipal and domestic supply (MUN) and aquatic life. The Basin Plan contains numeric water quality objectives for nitrate and unionized ammonia, and a narrative water quality objective for biostimulatory substances to protect these beneficial uses. These water quality objectives are routinely exceeded in the Santa Maria River, Orcutt-Solomon Creek, and Oso Flaco Creek.

The Central Coast Water Board's goal in adopting TMDLs through this amendment is to eliminate water quality problems cause by elevated concentrations of nutrients, and specifically to ensure that the levels do not interfere with the attainment of these beneficial uses.

TMDLs

The TMDLs for nutrients are discussed in the Project Report Section 7. This section contains the technical and environmental characteristics of the TMDLs. Staff proposes the following TMDLs to protect the beneficial uses in the project area:

1) The municipal and domestic supply beneficial use is protected by the numeric water quality objective of 10 mg/L-N maximum for nitrate for the following waterbodies:

a) All reaches of Bradley Canyon Creek
b) All reaches of Bradley Channel
c) All reaches of Main Street Canal
d) Santa Maria River and Estuary from (312SMA) to Bull Creek Road (312SBC)
e) Orcutt (Solomon) Creek from the confluence with the Santa Maria River to the most upstream site on Orcutt-Solomon Creek at Black Road (312ORB),
f) All reaches of Oso Flaco Creek
g) All reaches of Little Oso Flaco Creek.

2) The general water quality objective for toxicity includes a maximum concentration of 0.025 mg/L for un-ionized ammonia (NH_3-N) for the following waterbodies:

a) All reaches of Bradley Canyon Creek
b) All reaches of Bradley Channel
c) All reaches of Blosser Channel
d) All reaches of Main Street Canal
e) Santa Maria River and Estuary from (312SMA) to Bull Creek Road (312SBC)
f) Orcutt (Solomon) Creek from the confluence with the Santa Maria River to the most upstream site on Orcutt-Solomon Creek at Black Road (312ORB),
g) All reaches of Oso Flaco Creek

3) Aquatic life is protected by a maximum Benthic Algal Biomass of 150 mg chl-*a*/m^2 for waterbodies supporting COLD beneficial uses for the following waterbodies:

a) Santa Maria River and Estuary from (312SMA) to Bull Creek Road (312SBC)
b) Orcutt (Solomon) Creek from the confluence with the Santa Maria River to the most upstream site on Orcutt-Solomon Creek at Black Road (312ORB),

and

Aquatic life is protected by a maximum Benthic Algal Biomass of 200 mg chl-*a*/m^2 for waterbodies supporting WARM beneficial uses for the following waterbodies:

a) All reaches of Bradley Canyon Creek
b) All reaches of Bradley Channel
c) All reaches of Blosser Channel
d) All reaches of Main Street Canal
e) All reaches of Oso Flaco Creek
f) All reaches of Little Oso Flaco Creek.
g) All reaches of Oso Flaco Lake

4) Aquatic life is protected by a maximum Biostimulatory Risk Index score of 0.40 for the following waterbodies:

a) All reaches of Bradley Canyon Creek
b) All reaches of Bradley Channel
c) All reaches of Blosser Channel
d) All reaches of Main Street Canal
e) Santa Maria River and Estuary from (312SMA) to Bull Creek Road (312SBC)
f) Orcutt (Solomon) Creek from the confluence with the Santa Maria River to the most upstream site on Orcutt-Solomon Creek at Black Road (312ORB),
g) All reaches of Oso Flaco Creek
h) All reaches of Little Oso Flaco Creek.
i) All reaches of Oso Flaco Lake

Recommended Implementation Actions

The Implementation strategy is to target controllable, anthropogenic sources for reduction, and to monitor to see how concentrations are affected. The parties responsible for the allocation to controllable sources are not responsible for the allocation to natural sources. The Implementation Plan identifies management measures addressing each source category and identifies parties responsible for implementing actions to reduce nutrient loading.

The TMDL will be implemented through regulation via the Conditional Waivers of Waste Discharge Requirements for Discharges from Irrigated Lands, the National Pollutant Discharge Elimination System (NPDES) storm water permit requirements, Municipal Waste Discharge Requirements (WDRs) and associated Collection System Management Plans and Sewer System Management Plans, Basin Plan criteria for onsite wastewater systems, as well as via management measures for small animal operations. Implementation is required pursuant to existing regulatory authority through currently held NPDES permits, Waste Discharge Requirements, and through the proposed Cuyama River, Santa Maria River, Orcutt-Solomon Creek, and Oso Flaco Creek Watersheds Animal and Human Waste Discharge Prohibition. The Project Report Section 7 discusses

wasteload and load allocations for dischargers. The amendment establishes allocations that should result in attainment of water quality standards.

The Central Coast Water Board is consulting with stakeholders in developing these TMDLs and Implementation Plans. Implementing Parties may use this environmental documentation and are expected to conduct a more detailed environmental analysis for specific actions as appropriate. A draft CEQA analysis is presented in the Technical Report Section 9.7. The economic analysis is contained in the Technical Report Section 9.8.

Staff recommends a receiving water monitoring plan for nutrients that will allow staff to evaluate attainment of the TMDLs and allocations.